DOCUMENT RESUME

ED 225 497 HE 015 857

AUTHOR	Hodgkinson, Harold L.
TITLE	Guess Who's Coming to College: Your Students in 1990. A Research Report from the State-National Information Network for Independent Higher Education.
INSTITUTION	National Association of Independent Colleges and Universities, Washington, D.C. National Inst. of Independent Colleges and Universities.
PUB DATE	Jan 83
NOTE	22p.
AVAILABLE FROM	National Institute of Independent Colleges and Universities, 1717 Massachusetts Avenue, Suite 601, Washington, DC 20036 ($5.00).
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Adult Students; *Age Groups; Birth Rate; *College Attendance; College Students; Demography; *Enrollment Influences; *Geographic Distribution; Geographic Regions; Higher Education; Minority Groups; Nonschool Educational Programs; Nontraditional Students; Older Adults; *Population Trends; Prediction; Race; Student Characteristics; Trend Analysis

ABSTRACT

Major demographic trends affecting the size and composition of the college population, and consequences for higher education are examined. Trends and implications include the following: the under-20 group will fall below 30 percent during the decade; total births and birth rates are up in the Sun Belt and holding even or declining in most of the Frost Belt; Native Americans, Hispanics, Orientals, and some religious groups are increasing rapidly; a much higher percentage of the diminished youth cohort of the decade will be from minority backgrounds, single-parent families, multiple-earner families, and others who may have problems getting prepared for college; industry, the military, government, and voluntary agencies are educating 75 percent of U.S. adult learners; there is a rapid expansion in the numbers of those over 65, which may affect issues of access to education and assistance; women and Blacks have rapidly gained better access to higher education, while Hispanics will also; and a large increase in the 35- to 44-year-old age group will mark the economic development of the 1980s. It is suggested that liberal arts institutions, which have relied on attracting a white, middle-class, suburban student body, will be more vulnerable, and collaboration with industry, the military, and others may bring new programs to higher education. (SW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED225497

GUESS WHO'S COMING TO COLLEGE:

YOU. STUDENTS IN 1990

by

Harold L. Hodgkinson

January 1983

A Research Report From The State-National Information Network For

Independent Higher Education

PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

NIEC

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION

HE 015 857

National Institute of Independent
Colleges and Universities

1717 Massachusetts Avenue N.W.
Suite 601
Washington, D.C. 20036
(202) 483-9434

©1983, by the National Institute of Independent Colleges and Universities

Additional copies of this report are available at a cost of $5.00 each.

Foreword

As I think back on the development of our research and policy analysis capabilities over the last six years, I'm somehow reminded of the garden scene in the second act of "The Fantasticks."

That's the one in which the two fathers commiserate about how much more sensible it is to raise vegetables than children. "Plant a cabbage; Get a cabbage," they exclaim in musical unison. But parent a child and you never know what you're going to get.

Six years ago, while Bud Hodgkinson was taking leave of the Directorship of the National Institute of Education, I was taking leave of my normally good senses to plant what I imagined would be an ordinary research cabbage in the NAICU vegetable garden.

But then, with the help of a small grant from the Lilly Endowment, Inc., I was able to get Bud Hodgkinson to help design our research operations. And from that moment on, ours could never be an ordinary research cabbage.

That's because Bud Hodgkinson is no ordinary man. He possesses an uncommon (and uncanny) ability to escape from the specious present, and to see more clearly than most what the present is generating for the future.

Just as he provided us with a flexible research design to meet future needs six years ago, now he is providing us with a prescient look at our own enrollment futures.

This paper was prepared originally for the National Commission on Student Financial Assistance, with the advance understanding that publishing rights would be preserved for NIICU. That was a great favor for us, which is characteristic of Bud Hodgkinson.

And it's a great pleasure for me now to introduce this remarkably insightful paper to our membership, and at the same time to reintroduce an old friend. No ordinary research cabbage, he.

John Phillips
NIICU President

Overview

Institutions of higher education will have to plan for a decline in the size of the cohort graduating from high school. This decline will last until 1998. It is caused by the decline in births following the Baby Boom years. The Baby Boom sharply increased birth rates from 1946 to 1964; it was followed by a slump in births that lasted from 1964 to 1978. We are currently seeing an increasing birth rate, but of much smaller size than the Baby Boom rates, due largely to the smaller size of the family, new occupational opportunities for women, and new patterns of living singly.

Differential fertility means that not all families have the same number of children. The birth rate decline was primarily a white and middle-class phenomenon, while a proportionate increase in minority births and children raised by single-parent families and multiple-earner families suggests that more of these youth will be unprepared for college during the decade. Blacks and women are now proportionately represented among college populations, while Hispanics are not, and may form a growth group in higher education.

Higher education analysts have systematically ignored the rapidly increasing percentage of minorities in American public schools, now 46 percent in Texas, 43 percent in California, and 32 percent in New York State.

Regional differences will increase during the decade. Some Sun Belt states are already encountering major increases in the number of elementary school children, teacher shortages, need for new school construction, etc., while Frost Belt states do not show much of an increase, and will not for some years. This trend suggests that by the end of the decade, higher education in the Sun Belt will have already expanded, while Frost Belt states will continue to constrict their higher education enrollments.

As a consequence, state and regional policymaking authority will increase during the decade. Higher education will have to get used to a smaller contingent of white, middle-class students from suburban backgrounds in their entering classes, and will have to provide new programs in order to attract minorities, older adults, and programs offered in conjunction with industry, the military, and other users of educational services.

Introduction

Every society is constructed on a foundation of demographic assumptions. When these assumptions shift, as they do from time to time, the result is a major shock felt throughout the foundation and throughout the society in total. No part of the social system is immune to these shocks.

However, because demographic changes, especially changes in the size and nature of the birth cohort, take many years to run their course through the age spectrum, it is possible to have early warning systems built up to help us minimize the effects of demographic shocks. Unlike business, with their powerful environmental scanning systems and processes, the higher education structure has been weak in planning for future generations of college students, even though the data have been experienced by elementary school leaders and then secondary schools. Demographic knowledge is essential if higher education is to become less reactive and more productive in the future.

The plan of this paper will be to look briefly at some of the major demographic findings, then look at some of the consequences for higher education.

The Baby Boom and Aftermath

During the years 1946 to 1964, birth rates in all parts of the United States turned upward at a very high rate. (European nations had a marked increase in births after World War II as well, but theirs lasted only about three to four years. Why ours lasted 18 years is still a mystery.) After 1964, birth rates fell almost as fast as they had risen. By 1979/1980, births were beginning to move upward again, but not in the same even manner everywhere in the country.

In 1982, we are looking not at an increase or decrease alone, but at a wave. At the crest of the wave is the Baby Boom generation, now in its forties. During the 1980s, the 35 to 44 age group increases in size by 42 percent. After the wave crest comes a trough of population decline reaching from those in the early twenties down to about age 5. At the back of the trough, a new crest is beginning to form composed of the Baby Boom's children. This "echo" of the original Baby Boom cohort is very much smaller due to the large number of women who have either had no children, who have cut down on family size, or who have a larger number of career options today, etc.

The Baby Boom has sequentially put exorbitant demands on every age level it moves through, like a mouse in a snake. The expansion came first with hospital maternity wards, then expansion of

Levittown-like suburbs, then elementary schools, then secondary schools, then colleges, then entry-level jobs in the work-force, etc. As the mouse moved on by, demand for services at each age level declined rapidly, starting with maternity wards, then a rash of elementary school closings, then secondary schools, and perhaps colleges in the 1980s. Certainly in the 1980s there will be far fewer youth to fill entry positions in the work place. Thus, with no federal policy needed, unemployment will probably decline (unemployed youth make up a large number of cases), violent crime will be reduced (most violent crimes are committed by young people--many cities are already reporting decreases), a volunteer army becomes unlikely by the end of the decade, and youth-oriented businesses like the fast-food industry, newspaper delivery services, etc., have to make other arrangements.

At the other end of the snake, a much smaller mouse can now be seen--in many parts of the country, kindergarten and elementary schools are facing major teacher shortages, new schools are needed, and youth-oriented consumption patterns (toys, baby foods, cereals) are on the increase. In about 1998, this cohort will become the first group of high school graduates of increased size since the Baby Boom.

Some communities are dealing with the crest-trough-crest pattern by establishing community holding companies, designed to hold on to public school buildings during their years of declining need, or transferring the buildings to other purposes until youth populations begin to increase again among elementary school children.

For higher education, we can look forward to a general decrease in the size of high school graduating classes for 16 years, followed by increased numbers of high school graduates beginning in 1998. However, the analysis is complicated by several other factors which make it more difficult to predict increased college enrollments after 1998.

Differential Fertility

A key problem in predicting college enrollments has to do with the fact that population changes are not carried evenly by all parts of our population. The major decline in births after the Baby Boom was almost completely a Caucasian (and probably middle class) phenomenon. Birth rates for minorities stayed even during

those years, resulting in an increased percentage of births coming from minorities, while white and middle-class births were a smaller percentage of the birth cohort. Today, the number of Native Americans, Hispanics, Orientals, Mormons, and Seventh Day Adventists are all increasing rapidly, because of either ethnic or religious values regarding family size, use of birth control, divorce, etc.

By 1990, minorities of all ages will constitute 20 to 25 percent of our total population, while their percentage among youth cohorts will be over 30 percent (it is 26 percent today). In some states, particularly Texas and California, minorities will be over 45 percent of the state birth cohort. It is difficult to deliberately avoid the educational needs of 45 percent of a state's youth. In addition, the secure retirement of today's 45-year-old white worker will be increasingly dependent upon the economy's ability to generate jobs for a higher percentage of minorities among today's youth.

Differential fertility is also a regional issue in the U.S. Both total births and birth rates (per thousand eligible females) are up in the Sun Belt and holding even or still declining in most of the Frost Belt. Thus, for the first time, we are faced with a "two nation" perspective on educational policy--trying to get more educational facilities and services for youth in the Sun Belt, and continuing to cut back on these same services in the Frost Belt. It is hard to imagine how a single federal policy on educational assistance can be equitable in both "nations." In less than a decade, the number of high school graduates will increase in most Sun Belt states. Some, like Texas, are increasing already due to immigration. But as we shall see, the percentage of minorities among these graduates will be very high, particularly for Black and Hispanic youth. Hispanics represent the largest sector of those homes in which a language other than English is spoken--36 percent of Miami's homes and 40 percent of San Antonio's homes. However, among 5- to 17-year-olds of Hispanic descent, 65 percent speak Spanish, but all but 16 percent speak English. Youth populations of Hispanics are much more multilingual than adult Hispanics. This is an optimistic notion as far as potential college attendance is concerned, in that English is the language of discourse in all but three of America's 3,000 colleges and universities.

There are two key trends that have largely escaped the notice of higher education leaders - first, the development of a "second system" of postsecondary education in business and industry, government, military, etc., now estimated to be educating 46 million Americans compared to higher education's 12 million. The second trend is more directly relevant to our purposes - the rapidly increasing cohort of minority students contained in America's public elementary and secondary schools. Most analysts have assumed that Mississippi and Louisiana have heavy minority enrollments but the rest of the country does not.

As Table I makes clear, most large states have a very high percentage of minority students enrolled in public schools, including 32 percent in New York State, 43 percent in California, 46 percent in Texas, 33 percent in Florida and Maryland, 28 percent in New Jersey and Delaware and Illinois. The percentages are generally even higher in the elementary schools than in secondary, suggesting that the future will hold even larger numbers of high school students who are from minority backgrounds. Several recent studies have suggested that in terms of over-all population, California will become a "minority majority" in about 18 years (the magical "Year 2000" is getting close). Education policy makers in California and Texas will have difficulty even in 1983 with the term "minority" as the term just barely applies to students in public schools in those states.

Although the demand for private elementary and secondary schools seems to be increasing and many new ones are being started, the number of students is very small, and we can anticipate that only 10 percent of American youth will be enrolled in private schools in the near future, as has been the case in the past. The conclusion for higher education is inescapable - there is no alternative but to accept the fact that American public schools are now very heavily enrolled with minority students, large numbers of whom will be college-eligible. Private elementary and secondary schools do not enroll enough students (mostly white) to alter this trend. Previous policies like "benign neglect" seemed reasonable to some when the percentage of minorities was 10-12 percent, but what state can reasonably be expected to neglect 40-45 percent of its youth? Such a policy would be suicidal for states like California and Texas, if not for the nation.

TABLE I

MINORITY PUBLIC SCHOOL ENROLLMENT
FALL 1980

State and Region	% of Total Enrollment	State and Region	% of Total Enrollment
United States	26.7	Southeast	
		Alabama	33.6
New England		Arkansas	23.5
Connecticut	17.0	Florida	32.2
Maine	0.9	Georgia	34.3
Massachusetts	10.7	Kentucky	9.1
New Hampshire	1.3	Louisiana	43.4
Rhode Island	8.2	Mississippi	51.6
Vermont	1.0	North Carolina	31.9
		South Carolina	43.5
Mideast		Tennessee	24.5
Delaware	28.8	Virginia	27.5
District of Col.	96.4	West Virginia	4.3
Maryland	33.5		
New Jersey	28.4	Southwest	
New York	32.0	Arizona	33.7
Pennsylvania	14.9	New Mexico	57.0
		Oklahoma	20.8
Great Lakes		Texas	45.9
Illinois	28.6		
Indiana	12.0	Rocky Mountain	
Michigan	21.3	Colorado	22.1
Ohio	14.7	Idaho	8.2
Wisconsin	9.3	Montana	12.1
		Utah	7.3
Plains		Wyoming	7.5
Iowa	4.1		
Kansas	12.7	Far West	
Minnesota	5.9	California	42.9
Missouri	14.8	Nevada	18.9
Nebraska	10.5	Oregon	8.5
North Dakota	3.5	Washington	14.1
South Dakota	7.9	Alaska	28.4
		Hawaii	75.2

SOURCE: These data were presented at a conference sponsored by the Institute for Educational Leadership on November 17, 1982, and will be contained in a project for the Secretary of Education entitled; Prospects for Financing Elementary and Secondary Education in the States. Publication is expected in December, 1982.

Thus, out of sheer self-interest, it would behoove the higher education community to do everything to make sure that the largest possible number of minority students do well in public school, and thus become college eligible. If this is not done, and significant numbers of minority students leave the public schools before graduation or graduate without the aspiration for college, the potential decline in the college cohort would not be 24 percent for the nation in 1990, but could be twice that. Several recent reports of increasing attrition of minority students from secondary schools add credence to this possibility.

The dependency of middle class white Americans on the success of minority youth in school and at work is just beginning. For example, we are moving rapidly from a period of worker abundance to a period of worker shortages, particularly as the number of entry-level workers declines. As a result, 90 percent of the work force in 1990 is already at work today. Additions to the work force will be drastically reduced, making all youth much more attractive as workers. Of the 10 percent added to the current work force by 1990, close to half will be minority. Rather than 17 workers paying for each retiree, as was the case in 1950, we now have about 3 workers per retiree, and by 1990 the number will be even less.

Retiring white workers will find themselves increasingly dependent on a work force heavily composed of minorities to pay their Social Security trust funds. Businesses seeking new employees (which they will do with great intensity by 1990) will be increasingly dependent on minority workers and on the educational system that educated them, from kindergarten to college. The motives for whites working with minority students and workers in the end of this decade will be neither political liberalism nor noblesse oblige - it will be enlightened self-interest. This is, of course, the major reason businesses are more interested in schools and colleges today than previously - the job structure is demanding increasingly high levels of higher order skills in workers, and it is vital to business that these skills are possessed by entry-level workers. (See Tables II and III.)

TABLE II

JOB SKILLS FOR 1990

- Evaluation and Analysis Skills
- Critical Thinking
- Problem Solving (Including Math)
- Organization and Reference Skills
- Synthesis
- Application to New Ideas
- Creativity
- Decision-making with Incomplete Information
- Communications Skills in Many Modes

SOURCE: Information Society, 1982.

TABLE III

TEN MOST RAPIDLY GROWING JOBS
1978 - 1990

	Growth Rate
Data Processing Machine Mechanics	147%
Paralegal Personnel	132%
Computer Systems Analysts	107%
Computer Operators	88%
Office Machine Services	80%
Computer Programmers	74%
Aero-Astronautic Engineers	70%
Food Preparation (Fast Food)	69%
Employment Counselors (Interviewers)	67%
Tax Preparers	65%

SOURCE: Max Casey, "Occupational Employment Growth Through 1990", Monthly Labor Review, August 1981, page 48.

The effects of differential fertility by class, ethnicity, and region are key indicators of higher education's drawing power in the next two decades. In that the swing to the Sun Belt is expected to continue (by 1990 19 percent of Americans will live in the West and 31 percent in the South, totalling 50 percent), we can expect that institutions of higher education located in Sun Belt states will begin to show gains in undergraduate student populations in a few years, while the Frost Belt institutions can look forward to at least a decade of decline in enrollments. It will obviously be very difficult to present the "needs" of higher education to the U.S. Congress by 1990, due to the contrariness of regions. States will be at the center by then. Governor Hunt of North Carolina is leading this state concern for education along with Delaware, Colorado, Mississippi, and many others.

Additional factors are at work. The declining proportion of youth in large segments of America during the decade may mean that many able youth will be able to move directly from high school to a good paying job, either bypassing college entirely (and getting a good education at the college level from their employer who will increasingly be providing these services) or deferring college for a few years. At the present time, over 20 percent of new college enrollees have not come directly from high school-- "stopping out" seems to be acceptable and even desirable.

In the past, women of all races have been underrepresented in college enrollments. Today, 52 percent of undergraduate enrollments are female. Access to graduate education for women has also increased dramatically, particularly in law and medicine. These increases have produced proportional decreases in the numbers of women who enter schools of teacher education, once the major stepping-stone for women into professional work. Women have entered middle management positions in many occupations with great frequency in the last decade, and that trend will almost certainly continue. However, neither bank presidents nor superintendents of schools are more than 3 percent female at the present time. Pressures from the middle-management levels, however, will increase for promotion of female chief executives in the next decade. With such role models, many more women will be encouraged to enter professional schools. (This will probably also be true of Blacks, particularly males.) However, Hispanics have not yet increased their number of college enrollments to the same extent. Twenty-eight percent of all Black youth age 18 to 24 enter

college, and 46 percent of all female youth, but the percentage of Hispanic youth who enter college is much lower. Estimates vary from 5 percent to 15 percent.

It is important to look at the chances for graduation of various groups. Here the data are less clear, due to the mobility from college to college, etc. It does appear that minorities have a higher attrition level than whites, but minorities are very often underprepared for college. Comparison of "high risk" groups of whites and minorities suggest similar levels of attrition. However, minority females in graduate programs--presumably highly selected--often show higher attrition levels than minority males or whites.

Regardless of attrition, any surge of new enrollments during the next two decades in higher education will be led by minorities, particularly Blacks and Hispanics. Looking at Cubans (mostly on the East Coast, especially in Florida), Puerto Ricans (in New York), Tex-Mex Chicanos (from San Antonio to Houston), the California Chicano, and others, it is clear that there are enormous differences in lifestyle and values within the Hispanic population. Each of these subgroups will wish to retain its own identity and values; thus a single "Hispanic Strategy" for higher education would not seem wise. The issues need to be worked out at state and regional levels, although their national implications are great indeed.

Lifelong Learners

Today, about 12 million people attend colleges and universities in the U.S. However, another 46 million adults are being educated by another service provider. These providers range from union educational colleges to the Management Academy of United Way, about 400 corporations that offer their own instructional programs to their employees, and the Graduate School of the U. S. Department of Agriculture, which alone educates some 12 million adults, about as many as are educated in all colleges and universities combined. AT&T spends $1.7 billion on its own education and training programs. According to the College Board, about 50 percent of all American adults are taking some form of organized instruction, but only a small minority of the total is learning in a college or university setting. If one quarter of these 46 million adults now being educated had decided to take

their education programs at a college or university, there would be no decline in enrollments in higher education. However, the pressure for further education has basically gone around colleges and universities; we have now built a "second system" of post-secondary education in the U.S. whose total investment per year is about what is invested in colleges and universities put together--about $50 billion.

Colleges and universities have benefited from the rapid growth of continuing education programs, both credit and non-credit, now prescribed in many states for professional development in many fields. In that adults have families and jobs, the normal logistics of college courses have been altered--weekend colleges, evening courses, degree programs that require one Friday through Sunday package each month, etc. Whether or not content has been altered to meet the needs of the adult learner is not as easily addressed. In many cases, instruction is carried on as if the adults were normal post-pubescent adolescents, while the average age in the class may be 40, and the level of sophistication very high. It seems that whatever else the Baby Boom group did, it represents a very solid commitment to further education, but not necessarily a commitment to colleges and universities as the institutions whereby this new form of education may occur.

The Baby Boom has turned out to be a very innovative group, in terms of how they got into the job market, the patterns of living together they have pioneered, and the myriad of routes through which they learn. As a result of their persistence, the market for postsecondary education has become very disaggregated--there are a great many organizations that are providing educational services to adults, and because there are so many young adults (35 to 44), the diversification can be even greater. Because of the size of the Baby Boom, and because of their interest in learning rather than having all learning occur in one place, the further reduction in the influence of colleges and universities on this new "growth industry" seems certain. Five corporate education programs now offer their own degrees, and more are sure to follow. If higher education institutions want to become more active in the adult education area, they will have to modify their existing practices considerably. In addition, they have to keep watching the demography--if new adult programs are made ready by

1990, they may begin to catch the decline of the young adult population as the mouse passes on through the snake.

Certainly, the adult Baby Boomers have entered colleges and universities, but their participation has not been even by institutional type. Community colleges (which now have about half of all college and university enrollments) have clearly gone out of their way to meet the educational needs of adults, while prestigious liberal arts colleges, basically residential in nature, have not added large numbers of adults to their undergraduate student body. In most community colleges today, the average age of the students is 36 and climbing. More and more graduate degree programs are being tailored to the needs of adults, but these efforts seem to be more concerned with logistics and cosmetics than with the presentation and complexity of the content.

Other Issues

In 1950, the typical American family unit consisted of a working father, a housewife mother, and two or more school-age children. That pattern, which fit over 65 percent of the households in America in 1950, fits about 17 percent today. We are still overwhelmingly a nation of married people, but the stay-at-home wife and the two or more school-age children are no longer with us. As the birth rates increase in this decade, the number of working women will also increase, thus drastically increasing the need for day care facilities in the U.S. Multiple-earner families have become the dominant mode in America, producing a generation of "latchkey" children who are basically unattended by their families from the time they let themselves into the house with their own key in the afternoon until parents return from work in the evening.

The number of children reared in single-parent families has risen in spectacular fashion in the last decade. In 1980, the Census reported that of those children being born in 1980, 48 percent of them would basically be raised by a single parent. This is particularly important because of the new research that has established that children from single-parent families have a great deal of difficulty learning in schools--they are far more often discipline problems than are children with two parents living at home, and their level of school achievement is considerably lower than two-parent children. Thus, there is good reason to believe that a large segment of the current early elementary school class

of the 1980's will be unable or unwilling to consider college when they are 18.

Although the Sun Belt still has a strong appeal as a place to move to, there are underlying signs of pathology in those areas which will alter the dynamics of higher education quite considerably. There is a new kind of poverty in the Sun Belt-- in Phoenix, the poverty area is almost 15 square miles. This happened because of the city's solution to the problem of increasing numbers of residents--don't increase the density of people per mile, just move the city limits out. As a result, there is a large area in the core of the city in which there are almost no services, no infrastructure, yet a large number of the city's poor live there. Houston is another city which has chosen to mortgage its future by not plowing current revenues back into the city in the form of improved infrastructure--better freeways, mass transportation, social services, etc. It may be that in many of the most rapidly expanding Sun Belt cities, in which the number of college-eligible youth will increase in the near future, there will have to be generated massive new sources of revenue for student financial assistance.

In addition to the major expansion of the 35 to 44 year old group at present, we are also encountering a rapid growth of the number of those over 65, of whom there will be 30 million by 1990. Those over 75 will also begin to increase dramatically-- 12 million by 1990. We have given little sustained attention to the educational needs of this rapidly increasing group (and remember that the Baby Boom arrives at this place in the snake by about the year 2000). As we think through educational initiatives for this age level, we might ponder whether or not a U.S. citizen, retired and living on a pension, has any rights to student financial assistance if he/she wishes to take courses or enroll for a degree. The normal arguments for investing in human resource development (access to the world of work, increasing productivity, etc.) do not apply, yet the person's educational needs may be very real and important. We also know that our elderly population will continue to improve in general health and vitality and will want to play a significant role in American life. Their numbers will be formidable in a political sense, and they vote in very large numbers. Education may well become one of the major issues on their agenda in the next two decades.

Summary and Conclusions

A number of trends have been mentioned in this paper which will have important implications for higher education. These include:

- During the decade, the U.S. overall population will show modest growth (242 million people by the year 1990), while the number of youth under age 20 will fall below 30 percent of the population for the first time in our history.
- At the tail end of this long decline, we can see that national birth rates are up since about 1979, producing an "echo" to the Baby Boom.
- Colleges and universities need to prepare for a general decline in high school graduates until 1998. However, Sun Belt and Frost Belt situations are in conflict, with increases in high school graduates coming early to Sun Belt states, and much later to the Frost Belt. Regional differences will continue to increase.
- A much higher percentage of the diminished youth cohort of the decade will be from minority backgrounds, from single-parent families, multiple earner families, and others who may have a difficult time getting prepared for college.
- A whole new array of service providers--industry, the military, government, and voluntary agencies--is educating three out of four adults being educated in the U.S., while colleges and universities are educating about one in four.
- A rapid expansion in the numbers of those over 65 may force us to develop a stance regarding their educational rights (both access and assistance).
- Women and Blacks have moved rapidly into better access to higher education, while Hispanics will show the most growth in the 1980's.
- A spectacular increase in the 35 to 44 year old age group will mark the economic developments of the 1980's, and gives cautious optimism for slow but consistent economic growth over the decade.

Because of intensifying differences in the U.S. by region, one can expect that far more educational decision-making will take place at the state and regional levels during the next decade or perhaps two. Those colleges and universities that have trimmed their sails during the 1970's through better management of human, fiscal and physical resources should be in a good position to survive with significance in the 1980s if they are realistic about the nature of the student cohorts that will be available to them. The more specific the "feeder" system, the better for the institution. (With the current high Mormon birthrate, Brigham Young University has no worries about having enough students.) The most vulnerable institutions will be liberal arts colleges and small universities that have relied on attracting a white, middle-class, suburban student body--there will simply not be enough of these students to go around. Increasing supplies of minority students and those in the 35 to 44 age range form two useful markets for institutions of higher education. In addition, collaboration with industry, the military, and other users of educational services can bring new programs to higher education. And the needs for new kinds of educational services among the over-65 age group should provide some stimulating new challenges in curriculum and faculty development for some institutions.

Many institutions that hired faculty in a small "age lump" during the sixties will find this same "age lump" retiring in a very short time frame. Some institutions will lose 50 percent of their faculty in a single five-year period. Early retirements and buy-outs may level this trend off somewhat. Maintaining good faculty morale during the 1980's will be difficult, but better management techniques should make it possible.

The 50 most selective institutions in the country will not need to worry about their selectivity--it may even increase in some institutions. But the ability of admitted students to pay their tuition bills may constitute a new worry for these and all other institutions. (Wesleyan was perhaps just being more honest than some when it admitted that ability to pay will be a factor in the admissions decisions of that institution.)

During the 1970's, it was easy for higher education institutions to ignore the growing needs of adults--as a result, new programs were developed that flowed around colleges and universities. During the 1980's, it will be impossible for higher educa-

tion to igrore the declines in their "normal" 18 to 24 year old age group. But given the increasing variation in the various regions of the U.S., the problem of getting higher education's "act together" for the Congress and the Executive Branch will be a formidable problem for the end of the decade. Alice and the looking glass may be an accurate metaphor for the condition of higher education.

Finally, it is hoped that in times of demographic downturn, colleges and universities will not resort to cut-throat techniques designed to do each other in. Recruiting practices are already undergoing major changes, not all of them healthy. Genuine concerns for institutional self-sufficiency should be balanced by the idealism that will be needed to serve the educational needs of the students we have, not the students we wish we had.

Sources

American Assembly, Columbia University. The Population Dilemma. New York: Prentice-Hall. 1971.

Bane, Mary Jo. Here to Stay: American Families in the Twentieth Century. New York: Basic Books. 1976.

Billings, John S. "The Diminished Birthrate in the United States" in T.J. Espenshade, ed., The Economic Consequences of Slowing Population Growth. New York: Academic Press. 1978.

Breneman, David. "The Coming Enrollment Crisis: What Every Trustee Should Know." Washington, DC: Association of Governing Boards. 1982.

Bumpass, Larry, and Westoff, Charles. "Baby Boom and Baby Bust: A New View", American Demographics. (Sept. 1979), 11-17.

Butz, William. Countercyclical US Fertility and its Implications. The Rand Paper Series - P6263. Santa Monica, California: Rand Corporation. 1978.

Cohen, Wilbur and Westoff, Charles. Demographic Dynamics in America. New York: Free Press. 1977.

Dresch, Stephen. "A Demographic-Economic Perspective on the Future of Higher Education" (mimeo). New Haven: Institute for Demographic and Economic Studies. 1979.

Easterlin, Richard. "Demographic Influences on Economic Stability: The United States Experience". Population and Development Review, Vol. IV, (March 1978). 1-22.

Hardy, James M. "Notes on the 1980s" (mimeo). 1980.

High School Graduates: Projections for the Fifty States. WICHE, NIICU, TIAA. Boulder, Colorado: WICHE. 1979.

Hodgkinson, Harold. "What's Still Right With Education." Phi Delta Kappan. (December 1982), 231-235.

Henderson, Kathy, "Adapting to Changes in the Characteristics of College-Age Youth". Washington D.C.: American Council on Education. 1978.

Lee, Ronald. "The Formal Dynamics of Controlled Population and the Echo, the Boom and the Bust. "Demography, Vol. II (November 1974), 563-585.

Masnick, George. "Those Perplexing U.S. Fertility Swings: A New Perspective on a Twentieth Century Puzzle". PRB Report. November 1978. 1-10.

Oppenheimer, Valerie K. "The Easterlin Hypothesis: Another Aspect of the Echo to Consider". Population and Development Review, Vol. II (Fall 1976), 433-55.

Rhine, Shirley. America's Aging: Issues Facing Business and Society. Report No. 785. New York: The Conference Board. 1980.

Ross, Douglas N., ed. Population Trends and Implications. Report No. 735. New York: The Conference Board. 1977. Stewart, Ian. "Higher Education Faces Hard Times Ahead". American Demographics (June 1979), 12-23.

U. S. Department of Commerce, Bureau of the Census. "Projections of the Population of the United States: 1977 to 2050". Current Population Reports. Series P-25, No. 805. (May 1979).

Westoff, Charles F. "The Decline of Fertility". American Demographics. (February 1979), 16-19.